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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,865	08/01/2003	Fumihito Imai	Q76751	9157
23373	7590	11/10/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			WATKO, JULIE ANNE	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,865

Applicant(s)

IMAI, FUMIHITO

Examiner

Julie Anne Watko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-11 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Applicant cannot rely upon the foreign priority papers to overcome any rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Drawings

3. Figures 6a-9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The recitations of claim 7 limit a cartridge; however, the claimed drive is not further limited by said recitations. The cartridge is an intended use of the claimed drive. A recitation of the intended use of the claimed drive must result in a structural difference

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between the claimed drive and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art drive is capable of performing the intended use, then it meets the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Schick '849 (US Pat. No. 6172849 B1).

As recited in claim 1, Schick '849 shows a disk cartridge 10 in which a discoid recording medium 14 is rotatably contained in a housing (18a and 18b) and which is inserted (see Fig. 7) into slot formed in a disk drive to be placed in the disk drive, wherein the housing includes an opening 13 for a read/write head of the disk drive to access a surface of the recording medium, rotary shutter 16 for opening/closing the opening, and shutter locking means for locking the rotary shutter at closed position, the rotary shutter is constituted so that a lock on the rotary shutter is released by lock releasing means (including 48; see col. 4, lines 37-38, "shaft portion 34b flexibly releases shutter 16 when a rotational force is applied to the shutter 16") and shutter opening means (including 48) provided in the disk drive when inserting the disk cartridge into the disk drive, and the rotary shutter is rotated to an open position (see Fig. 8), and the rotary shutter is constituted to be led to the closed position (by 48a; see col. 5, lines 17-23) when ejecting the disk cartridge from the disk drive by the force of ejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schick '849 (US Pat. No. 6172849 B1).

Schick '849 shows a cartridge as described above for claim 1.

As recited in claim 2, Schick '849 shows that the shutter locking means comprises: a shutter locking member 34 having a convex engaging portion 36 which can engage (see Fig. 6) with a concave engaging portion 16d formed on a periphery of the rotary shutter 16, and rotatably provided between a shutter locking position where the convex engaging portion engages with the concave engaging portion and a lock releasing position (see dashed line in Fig. 6) where the convex engaging portion is escaped from the concave engaging portion in the housing.

As recited in claim 2, Schick '849 does not explicitly show a spring member which urges the shutter locking member toward the shutter locking position; however, it is clear from the reference that 34 is made from a springy material.

Separation and integration of parts within the level of ordinary skill in the art does not give rise to patentability, absent unexpected results due to the separation or integration. See, e.g.,

In re Larson, 144 USPQ 347 (CCPA1965).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a spring member in lieu of providing a springy shutter locking member. The rationale is as follows: one of ordinary skill in the art would have been motivated to separately optimize part materials for elasticity, weight, cost and durability as is notoriously well known in the art.

9. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schick '849 (US Pat. No. 6172849 B1) as applied to claim 2 above, and further in view of Schick et al '067 (US Pat. No. 6178067 B1).

Schick '849 shows a cartridge as described above for claims 1-2.

As recited in claim 3, Schick '849 is silent regarding a lock releasing member which engages the shutter locking member when inserting the disk cartridge into the disk drive and rotates the shutter locking member from the shutter locking position to the lock releasing position by resisting urging force of the spring member.

As recited in claim 3, Schick et al '067 show a lock releasing member 51 which engages the shutter locking member when inserting (see Figs. 10A-B) the disk cartridge into the disk drive and rotates the shutter locking member 37 from the shutter locking position to the lock releasing position by resisting urging force of a spring member 37d (see Figs. 7A-B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to engage the shutter locking member of Schick '849 with a shutter locking member as taught by Schick et al '067. The rationale is as follows: one of ordinary skill in the art would have been motivated to unlock and open the shutter so as to prepare for the read/write heads to access the media as taught by Schick et al '067.

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Schick '849 shows a cartridge as described above for claims 1-3.

As recited in claim 4, Schick '849 is silent regarding whether an arcuate groove which is concentric with the rotary shutter is formed in the housing of the disk cartridge, and a shutter knob which protrudes from the arcuate groove and can move along the arcuate groove is attached to the rotary shutter, and the shutter opening means provided in the disk drive is constituted of an engaging wall which engages with the shutter knob of the rotary shutter released by the lock releasing means when inserting the disk cartridge into the disk drive and rotates the rotary shutter to the open position.

As recited in claim 4, Schick et al '067 shows that an arcuate groove 35 which is concentric with the rotary shutter is formed in the housing of the disk cartridge, and a shutter knob 17 which protrudes from the arcuate groove and can move along the arcuate groove is attached to the rotary shutter, and the shutter opening means provided in the disk drive is constituted of an engaging wall (part of frame 50; see col. 5, lines 30-39, "the projection operates by impinging upon the cartridge insertion opening of drive 50 as cartridge 10 is inserted into drive 50. Because projection 17 extends beyond the general thickness of cartridge 10, projection 17 cannot fit through the narrow drive opening. Accordingly, as a cartridge 10 is forced into drive 50, projection 17 impinges on the frame of drive 50 and thereby drags shutter 16 to an open position") which engages with the shutter knob of the rotary shutter released by the lock releasing means when inserting the disk cartridge into the disk drive and rotates the rotary shutter to the open position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the arcuate groove and knob of Schick et al '067 to the cartridge of Schick '849

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as taught by Schick et al '067. The rationale is as follows: one of ordinary skill in the art would have been motivated to add the knob and groove to the cartridge in order to drag the shutter to an open position as taught by Schick et al '067.

Allowable Subject Matter

10. Claims 5-11 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5 and its dependent claims: The prior art of record neither shows nor suggests the claimed shutter open means and shutter close means. Claim 5 is interpreted according to the 6th paragraph of 35 U.S.C. § 112.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wakabayashi et al (JP 58-130486 A) show a disk cassette comprising rotatable shutter 7 and a spring 10 (see Figs. 2(b)-(c) and 3).

Aoishi (US PAP No. 2004/0021986 A1) show a disk cartridge comprising shutter locking member 11.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

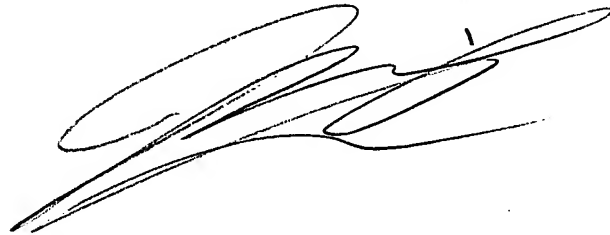
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on Monday-Thursday until 4:45PM, and Friday until 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Julie Anne Watko
Primary Examiner
Art Unit 2653

October 27, 2005
JAW

A handwritten signature in black ink, appearing to read 'Julie Anne Watko', with a stylized, flowing script.